



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

| | | | | |
|-----------------|-------------|----------------------|---------------------|------------------|
| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
| 10/711,495 | 09/21/2004 | Terry M. Olkin | 60468.300901 | 5494 |

| | | |
|-----------------------------------|------|------------|
| 32112 | 7590 | 06/14/2007 |
| INTELLECTUAL PROPERTY LAW OFFICES | | |
| 1901 S. BASCOM AVENUE, SUITE 660 | | |
| CAMPBELL, CA 95008 | | |

| | |
|---------------|--|
| EXAMINER | |
| CHAI, LONGBIT | |

| | |
|----------|--------------|
| ART UNIT | PAPER NUMBER |
| 2131 | |

| | |
|------------|---------------|
| MAIL DATE | DELIVERY MODE |
| 06/14/2007 | PAPER |

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

| | | | | |
|------------------------------|------------------------|--|---------------------|--|
| Office Action Summary | Application No. | | Applicant(s) | |
| | 10/711,495 | | OLKIN ET AL. | |
| | Examiner | | Art Unit | |
| | Longbit Chai | | 2131 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 April 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-26 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 September 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>4/25/2005</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Priority

1. Applicant's claim for benefit of domestic priority under 35 U.S.C. 119(e) is acknowledged.

The application is filed on 9/21/2004 but has a U.S. provisional application number 60/481,407 filed on 9/22/2003.

Specification

2. The disclosure is objected to because it contains an embedded hyperlink and/or other form of browser-executable code (SPEC: Page 3 Para [0011]). Applicant is required to delete / re-write the embedded hyperlink and/or other form of browser-executable code. See MPEP § 608.01.

Claim Objections

3. Claim 1 is objected to because of the following informalities: "the method" should be replaced with "the computer program". Appropriate correction(s) is (are) required.
4. Claims 1, 11 and 20 are objected to because of the following informalities: "the name of the owner" should be replaced with "a name of a owner". Appropriate correction(s) is (are) required.

Art Unit: 2131

5. Claims 5 and 14 are objected to because of the following informalities: "that listens listens" may be replaced with "listens" (to avoid unnecessary confusion).

6. Claims 5, 14 and 22 are objected to because of: "non routable" should be replaced with "non-routable". Appropriate correction(s) is (are) required.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

7. Claim 1 is rejected under 35 U.S.C. 101 because this claim is directed to "A computer program", which is merely an example of functional descriptive material, (i.e. software, per se), and is nonstatutory under 35 USC 101. By not limiting the computer program product to being stored on a computer readable storage medium, there is a lack of the required functional and structural interrelationship between the software and the computer storage medium that permits the functionality of the software to be realized upon access by a processor. This ability is what underlies the ability to provide a practical application. *Warmerdam*, 33 F.3d at 1361, 31 USPQ2d at 1760. In re *Sarkar*, 588 F.2d 1330, 1333, 200 USPQ 132, 137 (CCPA 1978). See MPEP § 2106 (IV.B).1(a). All dependent claims are rejected to as having the same deficiencies as the claims they depend from.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

A person shall be entitled to a patent unless –

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 1, 3, 4, 6 – 9, 11 – 13, 15 – 18, 20, 21 and 23 – 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Le Berre (Patent Number: EP 0940960 A1) in view of Schneider (U.S. Patent 6,760,746).

As per claim 1, Le Berre teaches a **computer program for assisting a user to determine whether a hyperlink to a target uniform resource locator (URL) is spoofed** (Le Berre: Abstract, the last sentence and Column 5 Line 56 – 58), the method comprising:

a code segment that listens with a computerized system for an activation of the hyperlink (Le Berre: Column 7 Line 28 – 27 and Column 5 Line 56 – 58: an activation of the URL link);

a code segment that extracts an originator identifier and encrypted data from the hyperlink (Le Berre: Figure 5 and Column 6 Line 31 – 55, Column 10 Line 31 – 32, Column 12 Line 56 – Column 13 Line 1 – 5 and Column 3 Line 42 – 45: (a) the originating server ID is qualified as an originator identifier and (b) a data element is encrypted at the originate server A by using its private key and (c) the receiving server

Art Unit: 2131

B decrypts the data and checks the received signature from within the qualified set of servers);

a code segment that decrypts said encrypted data into decrypted data based on said originator identifier (Le Berre: Figure 5 and Column 6 Line 31 – 55, Column 12 Line 51 – 52 and Column 12 Line 56 – Column 13 Line 1 – 5: (a) a data element is encrypted at the originate server A by using its private key (b) the receiving server B knows the corresponding public key of the originate server A and (c) the receiving server B decrypts the data and checks the received signature);

a code segment that redirects (Le Berre: Column 2 Line 30 – 34 and Column 6 Line 5 – 11; HTTP re-direction from server A to server B); and

a code segment that determines whether the hyperlink includes said originator identifier and said encrypted data decrypts successfully (Le Berre: Column 3 Line 42 – 45, Figure 5 and Column 6 Line 31 – 55 and Column 10 Line 31 – 32: the receiving server B decrypts the data and checks the received signature from within the qualified set of servers), and then:

runs said code segment that redirects, to redirect the user to the target URL (Le Berre: Figure 4 & Column 2 Line 30 – 34 and Column 6 Line 5 – 11);

Le Berre does not disclose expressly a code segment that presents information on a display unit; runs said code segment that presents, to present a confirmation of authentication to the user conveying the name of the owner and the domain name of the target URL, and otherwise, runs said code segment that presents, to present a warning dialog to the user.

Art Unit: 2131

Schneider in view of Le Berre teaches a **code segment that presents information on a display unit** (Schneider: Column 29 Line 9 – 13); **runs said code segment that presents, to present a confirmation of authentication to the user** (Le Berre: Column 8 Line 48 – 51) **conveying the name of the owner and the domain name of the target URL** (Schneider: Column 29 Line 9 – 13: (a) displaying the URL information with the chosen target domain name being used as a re-direct URL and (b) the OriginateServerID as shown on the URL (Le Berre: Figure 5) that holds the private / public key is qualified as the name of the owner), **and otherwise, runs said code segment that presents, to present a warning dialog to the user** (Schneider: Column 12 Line 50 – 52 and Column 21 Line 52 – 53: an error message upon the detection of an invalid URL (or not accessible) or with invalid domain name is displayed).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine the teaching of Schneider within the system of Le Berre because (a) Le Berre teaches using a signed URI (Universal Resource Identifier) link to access a resource from the internet and to re-direct the client request from server A to another server B under the same network domain after authentication (Le Berre: Figure 4 & Column 2 Line 30 – 34 / Line 44 – 45 and Column 6 Line 5 – 11), and (b) Schneider discloses an enhanced presentation for clarity purpose by displaying the URL information with the chosen target domain name being used as a re-direct URL and also display an error message upon the detection of an invalid URL (or not accessible) or with invalid domain name (Schneider: Column 29 Line 9 – 13, Column 5 Line 56 – 58 and Column 3 Line 42 – 45).

Art Unit: 2131

As per claim 11 and 20, Le Berre teaches a system for assisting a user to determine whether a hyperlink to a target uniform resource locator (URL) is spoofed (Le Berre: Abstract, the last sentence and Column 5 Line 56 – 58), the system comprising:

a logic in said computerized system that listens for activation of the hyperlink (Le Berre: Column 7 Line 28 – 27 and Column 5 Line 56 – 58: an activation of the URL link);

a logic that extracts an originator identifier and encrypted data from the hyperlink (Le Berre: Figure 5 and Column 6 Line 31 – 55, Column 10 Line 31 – 32, Column 12 Line 56 – Column 13 Line 1 – 5 and Column 3 Line 42 – 45: (a) the originating server ID is qualified as an originator identifier and (b) a data element is encrypted at the originate server A by using its private key and (c) the receiving server B decrypts the data and checks the received signature from within the qualified set of servers);

a logic that decrypts said encrypted data into decrypted data based on said originator identifier ((Le Berre: Figure 5 and Column 6 Line 31 – 55, Column 12 Line 51 – 52 and Column 12 Line 56 – Column 13 Line 1 – 5: (a) a data element is encrypted at the originate server A by using its private key (b) the receiving server B knows the corresponding public key of the originate server A and (c) the receiving server B decrypts the data and checks the received signature);

a code segment that redirects ((Le Berre: Column 2 Line 30 – 34 and Column 6 Line 5 – 11; HTTP re-direction from server A to server B);

a logic that determines whether the hyperlink includes said originator identifier and that said encrypted data decrypts successfully (Le Berre: Column 3 Line 42 – 45, Figure 5 and Column 6 Line 31 – 55 and Column 10 Line 31 – 32: the receiving server

Art Unit: 2131

B decrypts the data and checks the received signature from within the qualified set of servers);

a logic responsive to said logic that determines, that redirects the user to the target URL (Le Berre: Figure 4 & Column 2 Line 30 – 34 and Column 6 Line 5 – 11); and

Le Berre does not disclose expressly a computerized system having a display unit; a logic responsive to said logic that determines, that presents on said display unit a confirmation of authentication conveying the name of the owner and the domain name of the target URL; and a logic responsive to said logic that determines, that presents on said display unit a warning dialog to the user.

Schneider in view of Le Berre teaches a computerized system having a display unit (Schneider: Column 29 Line 9 – 13); a logic responsive to said logic that determines, that presents on said display unit a confirmation of authentication (Le Berre: Column 8 Line 48 – 51) conveying the name of the owner and the domain name of the target URL (Schneider: Column 29 Line 9 – 13: (a) displaying the URL information with the chosen target domain name being used as a re-direct URL and (b) the OriginateServerID as shown on the URL (Le Berre: Figure 5) that holds the private / public key is qualified as the name of the owner), and a logic responsive to said logic that determines, that presents on said display unit a warning dialog to the user (Schneider: Column 12 Line 50 – 52 and Column 21 Line 52 – 53: an error message upon the detection of an invalid URL (or not accessible) or with invalid domain name is displayed).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine the teaching of Schneider within the system of Le Berre because (a) Le Berre teaches using a signed URI (Universal Resource Identifier) link to access a resource from the internet and to re-direct the client request from server A to another server B under the same network domain after authentication (Le Berre: Figure 4 & Column 2 Line 30 – 34 / Line 44 – 45 and Column 6 Line 5 – 11), and (b) Schneider discloses an enhanced presentation for clarity purpose by displaying the URL information with the chosen target domain name being used as a re-direct URL and also display an error message upon the detection of an invalid URL (or not accessible) or with invalid domain name (Schneider: Column 29 Line 9 – 13, Column 5 Line 56 – 58 and Column 3 Line 42 – 45).

As per claim 3, 12 and 21, Le Berre as modified teaches said code segment that listens runs as a service in said computerized system (Le Berre: Column 5 Line 24 – 27: running as a HTTP server to provide the authentication services).

As per claim 4 and 13, Le Berre as modified teaches said code segment that listens includes a hypertext transport protocol (HTTP) server (Le Berre: Column 5 Line 24 – 27: running as a HTTP server to provide the authentication services).

As per claim 6, 15 and 23, Le Berre as modified teaches said code segment that decrypts includes a code segment that extracts the target URL from said decrypted data (Le Berre: Column 6 Line 5 – 18).

As per claim 7, 16 and 24, Le Berre as modified teaches a code segment that extracts a digital signature from said decrypted data; and a code segment that verifies said digital signature against said originator identifier (Le Berre: Figure 5 and Column 6 Line 31 – 55, Column 12 Line 51 – 52 and Column 12 Line 56 – Column 13 Line 1 – 5: (a) a data element is encrypted at the originate server A by using its private key (b) the receiving server B knows the corresponding public key of the originate server A and (c) the receiving server B decrypts the data and checks the extracted signature).

As per claim 8 and 17, Le Berre as modified teaches said code segment that decrypts employs a public key associated with said originator identifier (Le Berre: Column 12 Line 56 – Column 13 Line 1 – 5 and Column 3 Line 42 – 45: (a) a data element is encrypted at the originate server A by using its private key (b) the receiving server B knows the corresponding public key of the originate server A and (c) the receiving server B decrypts the data and checks the received signature).

As per claim 9, 18 and 25, Le Berre as modified teaches a code segment that matches said originator identifier to one of a plurality of registered originators; and a code segment that retrieves a decryption key associated with said originator identifier

Art Unit: 2131

for use by said code segment that decrypts (Le Berre: Column 3 Line 42 – 45 and Column 12 Line 56 – Column 13 Line 1 – 5: the receiving server B decrypts the data and checks the received signature from within the qualified set of servers – i.e. by using the public key from within the qualified set of a plurality of originate servers).

9. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Le Berre (Patent Number: EP 0940960 A1) in view of Schneider (U.S. Patent 6,760,746), and in view of Dunnion et al. (U.S. Patent 2002/0199119).

As per claim 2, Le Berre as modified does not disclose expressly the computer program is digitally signed.

Dunnion teaches the computer program is digitally signed (Dunnion: Para [0099]: the entire downloaded program can be digitally signed for security reason to ensure that the software downloaded is actually that provided by the supplier and has not been replaced or altered).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine the teaching of Dunnion within the system of Le Berre as modified because (a) Le Berre teaches using a signed URI (Universal Resource Identifier) link to access a resource from the internet and to authenticate the requesting user with a signed data signature from within the qualified set of servers (Le Berre: Column 5 Line 56 – 58 and Column 3 Line 42 – 45), and (b) Dunnion teaches providing a method of a security services system where not only the data files and email traffic

Art Unit: 2131

need to be secured but also the entire downloaded program can be digitally signed for security reason to ensure that the software downloaded is actually that provided by the supplier and has not been replaced or altered (Dunnion: Para [0005] and Para [0099]).

10. Claims 5, 14 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Le Berre (Patent Number: EP 0940960 A1) in view of Schneider (U.S. Patent 6,760,746), and in view of Perry (U.S. Patent 2003/0154306).

As per claim 5, 14 and 22, Le Berre as modified does not disclose expressly said code segment that listens at a preset non-routable internet protocol (IP) address and at a preset port.

Perry teaches said code segment that listens at a preset non-routable internet protocol (IP) address and at a preset port (Perry: Para [0025] Last sentence and Para [0024]: using a non-routable private IP address with a dynamically established port).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine the teaching of Perry within the system of Le Berre as modified because (a) Le Berre teaches using a signed URI (Universal Resource Identifier) link to access a resource anywhere from the internet and to re-direct the client request from server A to another server B under the same network domain (Le Berre: Figure 4 & Column 2 Line 30 – 34 / Line 44 – 45 and Column 6 Line 5 – 11), and (b) Perry teaches providing a non-routable private IP address with a dynamically established port for inbound connections with the advantage of conserving IP address,

Art Unit: 2131

which are becoming increasingly difficult to acquire due to exhaustion of the limited IP address space (Perry: Para [0016] Last sentence and Para [0025] Last sentence).

11. Claims 10, 19 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Le Berre (Patent Number: EP 0940960 A1) in view of Schneider (U.S. Patent 6,760,746), and in view of Haitsuka et al. (U.S. Patent 6,766,369).

As per claim 10, 19 and 26, Le Berre as modified does not disclose expressly said code segment that presents employs a dialog box that only software running locally in said computerized system can provide, thereby avoiding confusion with a remotely generated browser window.

Haitsuka teaches said code segment that presents employs a dialog box that only software running locally in said computerized system can provide, thereby avoiding confusion with a remotely generated browser window (Haitsuka: Column 7 Line 35 – 37, Column 8 Line 44 – 47 and Column 10 Line 49 – 52: the display can have not only a browser window but also a client window; where the client window is generated / controlled by the local client application).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine the teaching of Haitsuka within the system of Le Berre as modified because (a) Le Berre teaches using a signed URI (Universal Resource Identifier) link to access a resource from internet by using a secured SSL (Session Security Layer) for the exchanges between the user and the server (Le Berre: Column

Art Unit: 2131

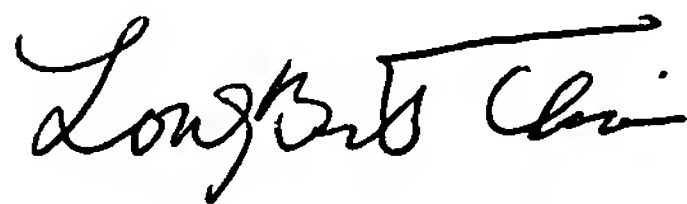
11 Line 8 – 10), and (b) Haitsuka teaches providing a flexible mechanism with a display having not only a browser window but also a client window; where the client window is generated / controlled by the local client application during a SSL communication session to indicate the connection status (including the authentication for a typical SSL connection) for the clarity purpose to avoid being confused with the display of browser window (Connery: Column 7 Line 35 – 37 and Column 10 Line 49 – 52 / Line 43 – 45).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Longbit Chai whose telephone number is 571-272-3788. The examiner can normally be reached on Monday-Friday 9:00am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ayaz R. Sheikh can be reached on 571-272-3795. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2131

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Longbit Chai, Ph.D.
Patent Examiner
Art Unit 2131
5/18/2007